

REMARKS

This amendment is responsive to the Office Action dated January 11, 2006. Applicant has amended claims 39, 41, 46, 48, 50, 52, 54, 57 and 59, and cancelled claims 40, 51 and 58. Claims 39, 41-50, 52-57 and 58-62 are pending upon entry of this amendment.

Claim Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 39-43, 50-53 and 57-61 under 35 U.S.C. 103(a) as being unpatentable over Lea (USPN 6,115,373) in view of Ikeda (USPN 5,787,073). The Examiner also rejected claims 44-45 and 49 under 35 U.S.C. 103(a) as being unpatentable over Lea in view of Ikeda in further view of Karol (USPN 5,416,769). Applicant respectfully traverses the rejection to the extent such rejections may be considered applicable to the claims as amended. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

Applicant has amended claim 39 to include limitations of dependent claim 40 to clarify that the claimed embodiment is directed to a cross-bar switch having a sink port that supports two distinct operating modes. In particular, the sink port of the cross-bar switch includes a programmable Retry input that supports both: (1) a Retry Mode, and (2) a Hold-off Mode. Depending on the mode, the programmable switch responds to a signal applied to the Retry input differently.

In the Retry Mode, the sink port actually aborts the current packet, waits a predetermined time and then retries transmission of that same packet. In Hold-off Mode, the sink port discontinues transmission only *after* the current data packet is transmitted and subsequently holds off transmitting further data packets until the retry signal is affirmatively altered. Thus, two differences exist between the modes. Unlike Retry Mode, in Hold-off Mode, the current packet is not aborted, but continues transmission until completion. Moreover, in Retry mode transmission is stopped for a predetermined time while in Hold-off Mode the duration for discontinuing transmission is not predetermined, rather the signal applied to the Retry input must be altered, thereby allowing for an indefinite stop in packet transmission.

In this manner, the claimed switch has a programmable sink port that provides two different operating modes by which the sink port responds to a signal applied to a Retry input. These modes are described on pg. 22, ln. 25 – pg. 23, ln. 4 of the present application. Applicant has amended claim 50 to include similar limitations from dependent claim 51, and amended claim 57 to include similar limitations from claim dependent 58.

Lea describes a switch having a switch matrix (FIG. 10). In column 6, cited by the Examiner, Lea describes regulating flow based on a congestion indication signal. Lea provides no other details with respect to the operation of the switch with respect to regulating flow.

Ikeda describes an ATM switch that stops transmission of data cells for a predetermined period of time before continuing based on a received backpressure cell.

First, Applicant submits that Lea in view of Ikeda fails to teach or suggest a switch having a programmable sink port that operates in two different modes in response to signal applied to a retry port. Applicant can find no mention in Lea or Ikeda of a programmable feature at all, let alone a suggestion of a sink port that is programmable in the manner claimed by the Applicant. Moreover, none of the references, either singularly or in combination, teach or suggest a switch having a sink port that is capable of operating in two different modes with respect to application of a retry signal.

Second, none of the reference, either singularly or in combination, suggest any reason to modify a switch to include a sink port having such programmable features for operating in one of two different modes in response to a retry signal. The Lea ATM switch already includes mechanisms for regulating flow based on a congestion indication signal, while the Ikeda ATM stops transmission of data cells for a predetermined period of time before continuing based on a received backpressure cell. The Examiner has provided no evidence in the record that one skilled in the art would attempt to address some deficiency of the LEA switch based on the Ikeda switch. Moreover, modification of the Lea switch based on the principles of Ikeda would presumably result in a switch that stops transmission of data cells for a predetermined period in time (as taught by Ikeda) in response to a congestion (backpressure) signal instead of requiring subsequent signals. In other words, the modified switch would still not provide a programmable sink port capable of operating in two different modes with respect to responding to a signal applied to retry port.

Third, Applicant submits that neither Lea nor Ikeda teach or expressly suggest a Retry mode in which current transmission of a packet is *aborted*. Although the Examiner cites Ikeda at col. 4 for this proposition, Ikeda only states that the controller “stops transmission of data cells for a period of time.” The plural form of “data cells” without reference to a current data cell tends to suggest that the controller in Ikeda merely directs the ATM switch to discontinue outputting new data cells. In any case, the teaching of Ikeda does not provide an enabling teaching or suggestion of aborting a current packet during transmission and then retrying that same packet, as required by the Retry Mode of Applicant’s claimed switch.

For at least the reasons set forth above, the cited references, either singularly or in combination, fail to establish a prima facie case for non-patentability of Applicant’s claims under 35 U.S.C. 103(a). Withdrawal of this rejection is respectfully requested.

Allowable Subject Matter

In the Office Action, the Examiner indicated that claims 46-48, 54-56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In this amendment, Applicant has rewritten claims 46, 48 and 54 in independent form, and has included all subject matter recited by the base claims and any intervening claims on which these claims depend. Consequently, claims 46-48 and 54-56 are in condition for allowance.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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By:

February 8, 2006
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